

Traffic Engineering Services (TES) Staff frequently receives complaints regarding traffic and safety related concerns on neighborhood collector roadways. These collector roadways serve a useful function in collecting up neighborhood traffic from the residential local streets and connecting that traffic to the arterial roadways. Many of these roadways within the City, however, have wider cross-sections than would be constructed by today's standards and historically have not been equipped with striping or other treatments to facilitate traffic calming, encourage use by multiple modes of transportation, and retain a neighborhood feel.

Starting in 2022, the City began a new Livable Streets Collector Roadway program to start addressing some of these issues and concerns in multiple areas. The installation of pavement markings to better delineate the vehicle travel lanes and visually narrow the roadways, which can have a traffic calming effect, is an initial step in these efforts. These modifications can also allow us to significantly shorten the effective exposed pedestrian crossing distances crossing these roadways, which also enhances safety.

In the case of Otero/Adams and Monroe, which are both collector roadways, we have heard resident concerns including speeding, cut-through traffic, and safety within the neighborhoods and also near the park and trail crossing.

As we develop concepts to retrofit existing roadways, it can be challenging to effectively balance division of space within a cross-section to right-size various elements. Bicycle facilities and buffers that are painted but do not include vertical elements can become attractive for aggressive drivers and/or create parking issues. We are careful to make sure that other non-vehicle travel lane subsections are not wide enough to appear as another vehicle lane.

In the case of Otero/Adams and Monroe, we have developed striping layout concepts, working from the center out to divide up the existing roadway width. Those concepts are attached for your information, but more information regarding the approach and development of the concepts follows below.

Case 1 concept – no on street parking

In areas where on street parking is not utilized, which are most of the segments of Otero/Adams and Monroe adjacent to single family homes and fencing, we started with a small painted center median to separate the opposing vehicle travel lanes and provide the opportunity for a pedestrian refuge.

Then we added a 10' vehicle travel lane for each direction of traffic – a 10' lane width is sufficient and appropriate for opposing directions of traffic to travel on a 25 or 30 mph collector roadway and will comfortably accommodate vehicles including school buses but this width also reinforces appropriate speeds and driver behavior.

And finally, we distributed the remaining space to include painted buffers and on street bike lanes for each direction of travel, to maintain usable instead of wasted space and provide for opportunities and choice for improved connectivity to the park or recreational purposes. Since bicycles, by Colorado law, can be on any roadway not specifically prohibited for their use (such as freeways), adding the marked bicycle facility does not change the existing roadway condition but simply provides an additional mode specific option to increase separation of bicycles from vehicles if the rider desires. Cyclists can continue to ride on the sidewalk or in the travel lane if they choose to do so – wherever the individual is most comfortable.

Case 2 concept – on street parking

In areas along Otero/Adams where on street parking could be needed, such as near the park and also near the multifamily residential areas, we have traded the median for an on-street parking lane on each side of the roadway.

Similarly to Case 1, we then added a 10' vehicle travel lane for each direction of traffic – as in that Case, a 10' lane width is sufficient and appropriate for opposing directions of traffic to travel on a 25 or 30 mph collector roadway and will comfortably accommodate vehicles including school buses but this width also reinforces appropriate speeds and driver behavior.

The final remaining space is allocated to include a bike lane for each direction, as in Case 1 to maintain usable instead of wasted space and provide for opportunities and choice for improved connectivity to the park or recreational purposes. Since bicycles, by Colorado law, can be on any roadway not specifically prohibited for their use (such as freeways), adding the marked bicycle facility does not change the existing roadway condition but simply provides an additional mode specific option to increase separation of bicycles from vehicles if the rider desires. Cyclists can continue to ride on the sidewalk or in the travel lane if they choose to do so.

We recognize that there was some history on Otero/Adams over 10 years ago related to a Citywide bicycle lane only project in which bicycle lanes but no other markings were applied and subsequently covered over. That project installed a total of 18 miles of bicycle lanes only on 10+ roadways across the City, of which two segments were then covered over: Otero/Adams and Telluride.

We want to be clear that that 10+ year old project took a different approach for different purposes unrelated to neighborhood conditions or traffic calming, and did not involve then Traffic Engineering staff. This is a different time, different purpose, and different approach.

Between last year and this year, projects with various cross-sections for different context-specific conditions have been installed on Monaco, Telluride, Chenango/Tower, Blackhawk, Flanders, and Detroit; and are pending in various stages on Progress/Crestline, Prentice, Easter, and several other future locations. Response from the surrounding communities, even on Telluride, has been overwhelmingly positive to date.

Depending on results and feedback, some roadways or areas may benefit from additional traffic calming mitigations, to be determined as needed on a case by case basis moving forward.

We also continue to identify additional opportunities for striping modifications to residential collector roadways on a rolling basis and anticipate continuing these efforts annually across the City until we run out of roads to tackle – we do work with our Streets folks to review each year's Citywide planned paving operations roadway segments, as just after a mill and overlay or surface treatment application is of course an optimal time for installations.

We are interested to hear from you if you have any questions or if you would like to let us know your feedback regarding the striping layout concepts. Please contact us at 303-325-8000 or abunce@centennialco.gov. Thank you!